

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1 1. (Currently Amended) A computer system comprising:
2 at least one processor; and
3 a flexible operating system comprising executable on the at least one processor to:
4 ~~code for determining~~ determine whether said operating system is being used as a
5 native operating system or as a virtualized operating system on said computer system; and
6 ~~operability for executing~~ execute in a first manner as a native operating system on
7 [[a]] the computer system in response to detecting that said operating system is being used as the
8 native operation system, and for executing execute in a second manner as a virtualized operating
9 system on said computer system in response to detecting that said operating system is being used
10 as the virtualized operating system; and.

1 2. (Cancelled)

1 3. (Currently Amended) The ~~flexible operating~~ computer system of claim [[2]] 1
2 wherein said operating system executing in said second manner comprises said operating system
3 acting as a paravirtualized operating system.

1 4. (Currently Amended) The ~~flexible operating~~ computer system of claim 3 wherein
2 said paravirtualized operating system is operable to make a call to a Virtual Machine Monitor
3 (VMM) for performing at least one privileged operation.

1 5. (Currently Amended) The ~~flexible operating~~ computer system of claim 1 wherein
2 ~~said code for determining comprises~~ operating system determines whether said operating system
3 is being used as the native operating system or the virtualized operating system by:
4 ~~code for~~ checking a global variable that indicates whether said operating system is being
5 used as [[a]] the native operating system or as [[a]] the virtualized operating system on said
6 computer system.

1 6. (Currently Amended) The ~~flexible-operating computer~~ system of claim 5 ~~further~~
2 ~~comprising~~, wherein said operating system is executable to further:
3 ~~code for executing~~ execute an instruction which, when the operating system is being used
4 as ~~[[a]]~~ the virtualized operating system, causes a Virtual Machine Monitor (VMM) to set at least
5 one configuration bit to a first value, and when the operating system is being used as ~~[[a]]~~ the
6 native operating system, causes the VMM to set said at least one configuration bit to a different
7 value.

1 7. (Currently Amended) The ~~flexible-operating computer~~ system of claim 6,
2 wherein said operating system is executable to further-comprising:
3 ~~code for setting~~ set said global variable based at least in part on the value of said at least
4 one configuration bit after executing said instruction.

1 8. (Currently Amended) The ~~flexible-operating computer~~ system of claim 1,
2 wherein said operating system is executable to further-comprising:
3 ~~code for making~~ make a call to a Virtual Machine Monitor (VMM) for performing at
4 least one privileged operation.

1 9. (Currently Amended) The ~~flexible-operating computer~~ system of claim 8 wherein
2 ~~said code for making~~ [[a]] the call to said VMM uses an Application Program Interface (API)
3 defined for said VMM.

1 10. (Currently Amended) The ~~flexible-operating computer~~ system of claim 8 wherein
2 ~~said code for making~~ [[a]] the call to said VMM is used for performing said at least one
3 privileged operation if determined that said operating system is being used as virtualized
4 operating system on said computer system.

1 11. (Original) A method comprising:
2 implementing at least one operating system on a computer system;
3 determining, by said computer system, whether said at least one operating system is a
4 native operating system or a guest operating system on a virtual machine;
5 said at least one operating system operating in a first manner if determined that it is a
6 native operating system; and
7 said at least one operating system operating in a second manner if determined that it is a
8 guest operating system on a virtual machine.

1 12. (Currently Amended) The method of claim 11 wherein said determining
2 comprises:
3 said at least one operating system determining whether it is being used as said native
4 operating system or as said guest operating system on the virtual machine.

1 13. (Original) The method of claim 12 wherein said at least one operating system
2 determines whether it is being used as said native operating system or as said guest based at least
3 in part on a value of a global variable.

1 14. (Original) The method of claim 11 wherein said first manner comprises acting as
2 a native operating system.

1 15. (Original) The method of claim 11 wherein said second manner comprises acting
2 as a paravirtualized operating system.

1 16. (Original) The method of claim 15 wherein said paravirtualized operating system
2 makes, for at least one privileged operation, a call to a Virtual Machine Monitor (VMM).

1 17. (Currently Amended) ~~[[An]]~~ A computer system comprising:
2 at least one processor;
3 a virtual machine monitor (VMM); and
4 an operating system comprising executable on the at least one processor to:
5 ~~code for determining~~ determine whether said operating system is running as a
6 virtualized operating system or a native operating system; and
7 ~~code for adapting~~ adapt operation of said operating system depending on whether
8 it is running as the virtualized operating system or native operating system, wherein the native
9 operating system manages hardware resources without using the VMM, and wherein the
10 virtualized operating system manages hardware resources using the VMM.

1 18. (Currently Amended) The ~~operating computer~~ system of claim 17 wherein said
2 ~~code for determining~~ operating system determines whether said operating system is running as
3 the virtualized ~~comprises code for~~ operating system or the native operating system by checking
4 the value of a global variable.

1 19. (Currently Amended) The ~~operating computer~~ system of claim 18 wherein said
2 ~~code for checking the value of a global variable~~ operating system checks said value of said
3 global variable before performing certain privileged operations.

1 20. (Currently Amended) The ~~operating computer~~ system of claim 17 wherein said
2 ~~code for determining~~ comprises:
3 ~~code for~~ operating system performs the determining by determining, before execution of
4 certain privileged instructions, whether said operating system is running as the virtualized
5 operating system or native operating system.

1 21. (Currently Amended) The ~~operating computer~~ system of claim 20 wherein said
2 ~~code for adapting~~ comprises: operating systems adapts by
3 if determined that said operating system is running as the virtualized operating system,
4 adapting operation of said operating system in executing said certain privileged instructions.

1 22. (Currently Amended) The ~~operating~~ computer system of claim 21 wherein said
2 adapting operation of said operating system in executing said certain privileged instructions
3 comprises:

4 making at least one call to a ~~Virtual Machine Monitor (VMM)~~ the VMM.

1 23. (Currently Amended) The ~~operating~~ computer system of claim 17 wherein said
2 ~~code for~~ adapting comprises:

3 ~~code for a call to a Virtual Machine Monitor (VMM)~~ calling the VMM for at least one
4 privileged instruction.

1 24. (Currently Amended) The ~~operating~~ computer system of claim 17 wherein said
2 ~~code for~~ operating system performs the determining ~~comprises~~:

3 ~~code for~~ by executing an instruction which, when the operating system is being used as
4 [[a]] the virtualized operating system, causes a ~~Virtual Machine Monitor (VMM)~~ the VMM to
5 set at least one configuration bit to a first value.

1 25. (Currently Amended) The ~~operating~~ computer system of claim 24 wherein said
2 ~~code for~~ operating system performs the determining by further ~~comprises~~:

3 ~~code for~~ determining whether said operating system is running as the virtualized
4 operating system or native operating system based at least in part on a determined value of at
5 least one configuration bit after execution of said instruction.

1 26. (Currently Amended) The ~~operating~~ computer system of claim 24 wherein said
2 ~~code for~~ operating system performs the determining by further ~~comprises~~:

3 setting a global variable to a value based at least in part on the value of said at least one
4 configuration bit after execution of said instruction.

1 27. (Currently Amended) A system comprising:
2 hardware resources;
3 a virtual machine monitor (VMM); and
4 at least one operating system for managing said hardware resources, wherein said at least
5 one operating system is operable to determine whether it is running in a virtualized environment
6 or in a native environment, wherein said at least one operating system is operable to selectively
7 execute in a first manner if determined that said at least one operating system is running in the
8 native environment and in said second manner if determined that said at least one operating
9 system is running in the virtualized environment, wherein in the first manner said at least one
10 operating system manages said hardware resources without using the VMM, and wherein in the
11 second manner said at least one operating system manages said hardware resources using the
12 VMM.

1 28. (Cancelled)

1 29. (Currently Amended) The system of claim [[28]] 27 wherein said first manner
2 comprises acting as a native operating system.

1 30. (Currently Amended) The system of claim [[28]] 27 wherein said second manner
2 comprises acting as a paravirtualized operating system.

1 31. (Currently Amended) The system of claim 30 wherein said paravirtualized
2 operating system is operable to make a call to ~~a Virtual Machine Monitor (VMM)~~ the VMM for
3 performing at least one privileged operation.

1 32. (Cancelled)

1 33. (Currently Amended) The system of claim ~~[[32]]~~ 27 wherein said at least one
2 operating system adapts its operation to make a call to said VMM for performance of at least one
3 privileged instruction when said at least one operating system determines that it is running in a
4 virtualized environment.

1 34. (Cancelled)

1 35. (Currently Amended) A system comprising:
2 at least one processor;
3 a flexible operating system executable on the at least one processor and that is capable of
4 acting as either a native operating system or as a virtualized operating system; and
5 means for determining whether the operating system is to be used as a native operating
6 system or as a virtualized operating system, wherein the determining means stores information
7 that is accessible by the flexible operating system to indicate whether the flexible operating
8 system is being used as a native or as a virtualized operating system.

1 36. (Original) The system of claim 35 wherein the determining means makes the
2 determination during a boot-up process of the system.

1 37. (Original) The system of claim 35 further comprising: means for virtualizing
2 resources of said system and multiplexing said resources among one or more virtualized
3 operating systems.

1 38. (Original) The system of claim 35 wherein said flexible operating system is
2 operable to access the stored information to determine whether said flexible operating system is
3 being used as a native or as a virtualized operating system.

1 39. (Original) The system of claim 38 wherein if determined that it is being used as a
2 virtualized operating system, said flexible operating system acting as a virtualized operating
3 system.

1 40. (Original) The system of claim 38 wherein if determined that it is being used as a
2 native operating system, said flexible operating system acting in a first manner, and if
3 determined that it is being used as a virtualized operating system, said flexible operating system
4 acting in a second manner.

1 41. (Original) The system of claim 40 wherein said first manner comprises acting as
2 a native operating system, and wherein said second manner comprises acting as a paravirtualized
3 operating system.

1 42. (New) The system of claim 35, wherein the virtualized operating system manages
2 hardware resources of the system by using a virtual machine monitor (VMM), and wherein the
3 native operating system manages the hardware resources without using the VMM.

1 43. (New) The computer system of claim 1, wherein the virtualized operating system
2 manages hardware resources of the system by using a virtual machine monitor (VMM), and
3 wherein the native operating system manages the hardware resources without using the VMM